FY

DATE: 08/01/2001 3/4(5)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/889,722

4 <110> APPLICANT: Japan Science and Technology Corporation

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\08012001\I889722.raw

ENTERED

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6 <120> TITLE OF INVENTION: Human nucleoprotein having a WW domain and
             a polynucleotide encoding the protein
     9 <130> FILE REFERENCE: 00-F-061PCT
C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/889,722
C--> 12 <141> CURRENT FILING DATE: 2001-07-20
    14 <150> PRIOR APPLICATION NUMBER: JP11-332572
    15 <151> PRIOR FILING DATE: 1999-11-24
    17 <160> NUMBER OF SEQ ID NOS: 7
    19 <170> SOFTWARE: PatentIn Ver. 2.0
    21 <210> SEQ ID NO: 1
    22 <211> LENGTH: 704
    23 <212> TYPE: PRT
    24 <213> ORGANISM: Homo sapiens
    26 <400> SEQUENCE: 1
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    29 Ser His Ser Pro Gly Thr Ser Asn Gln Ser Gln Pro Cys Ser Pro Lys
                     20
                                         25
    31 Pro Ile Arg Leu Val Gln Asp Leu Pro Glu Glu Leu Val His Ala Gly
    33 Trp Glu Lys Cys Trp Ser Arg Arg Glu Asn Arg Pro Tyr Tyr Phe Asn
    35 Arg Phe Thr Asn Gln Ser Leu Trp Glu Met Pro Val Leu Gly Gln His
                             70
                                                 75
     37 Asp Val Ile Ser Asp Pro Leu Gly Leu Asn Ala Thr Pro Leu Pro Gln
    39 Asp Ser Ser Leu Val Glu Thr Pro Pro Ala Glu Asn Lys Pro Arg Lys
                    100
                                        105
                                                            110
    41 Arg Gln Leu Ser Glu Glu Gln Pro Ser Gly Asn Gly Val Lys Lys Pro
                                    120
                                                        125
               115
    43 Lys Ile Glu Ile Pro Val Thr Pro Thr Gly Gln Ser Val Pro Ser Ser
                                135
    45 Pro Ser Ile Pro Gly Thr Pro Thr Leu Lys Met Trp Gly Thr Ser Pro
                            150
    47 Glu Asp Lys Gln Gln Ala Ala Leu Leu Arg Pro Thr Glu Val Tyr Trp
                                            170
    49 Asp Leu Asp Ile Gln Thr Asn Ala Val Ile Lys His Arg Gly Pro Ser
                    180
                                        185
    51 Glu Val Leu Pro Pro His Pro Glu Val Glu Leu Leu Arg Ser Gln Leu
                                    200
    53 Ile Leu Lys Leu Arg Gln His Tyr Arg Glu Leu Cys Gln Gln Arg Glu
                                215
    55 Gly Ile Glu Pro Pro Arg Glu Ser Phe Asn Arg Trp Met Leu Glu Arg
                                                235
                            230
    57 Lys Val Val Asp Lys Gly Ser Asp Pro Leu Leu Pro Ser Asn Cys Glu
                                            250
```

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Output Set: N:\CRF3\08012001\1889722.raw

59	Pro	Val	Val	Ser	Pro	Ser	Met	Phe	Arg	Glu	Ile	Met	Asn	Asp	Ile	Pro
60				260					265					270		
61 62	Ile	Arg	Leu 275	Ser	Arg	Ile	Lys	Phe 280	Arg	Glu	Glu	Ala	Lys 285	Arg	Leu	Leu
63	Phe	Lys 290	Tyr	Ala	Glu	Ala	Ala 295	Arg	Arg	Leu	Ile	Glu 300	Ser	Arg	Ser	Ala
65	Ser	Pro	Asp	Ser	Arg	Lys	Val	Val	Lys	Trp		Val	Glu	Asp	Thr	
66	305					310			_		315					320
67	Ser	Trp	Leu	Arg	_	Asp	His	Ser	Ala	Ser	Lys	Glu	Asp	Tyr		Asp
68	3	T 011	C1	774.0	325	2 22	7 ~~	C-1 n	Crra	330	Dro	ni c	17	Cor	335	פות
70	Arg	Leu	GIU	340	Leu	ALG	AIG	GIII	345	GIY	PIO	urs	Vai	350	AIG	AIG
	Ala	Lys	Asp	Ser	Val	Glu	Gly	Ile	Cys	Ser	Lys	Ile	Tyr	His	Ile	Ser
72		_	355					360					365			
73	Leu		Tyr	Val	Lys	Arg		Arg	Glu	Lys	His		Ala	Ile	Leu	Lys
74		370		_		_	375	_	_	_		380	_			
	Glu	Asn	Asn	Ile	Ser		Glu	Val	Glu	Ala		Glu	Val	Glu	Pro	
	385		_		_	390	1	_	-		395			.	D	400
	Leu	vaı	туг	Cys	_	Pro	vaı	Arg	Leu		vaı	ser	Ата	Pro		мет
78	Dwo	Com	17.1	C1	405	III o	Wot	C1.,	A a n	410	17.1	Va I	Crrc	т1.	415	Птт
80	Pro	ser	Val	420	Met	nis	мес	GIU	425	ASII	Val	Val	Cys	430	AIG	ıyı
	Lys	Glv	Glu		٧al	Lvs	Val	Ser		Asn	Tvr	Phe	Ser		Leu	Trp
82		0-1	435			-1-		440	5		-1-		445	-1-		
83	Leu	Leu	Tyr	Arg	Tyr	Ser	Cys	Ile	Asp	Asp	Ser	Ala	Phe	Glu	Arg	Phe
84		450	_	_	_		455					460				
85	Leu	${\tt Pro}$	Arg	Val	Trp	Cys	Leu	Leu	Arg	Arg	Tyr	Gln	Met	Met	Phe	Gly
	465					470					475					480
	Val	Gly	Leu	\mathtt{Tyr}		Gly	Thr	Gly	Leu		Gly	Ser	Leu	Pro		His
88		-1	~1		485				5 1	490	**- 1	a	D1	a1	495	Dh.
	Val	Pne	GIU	500	Leu	HIS	Arg	Leu	505	GIY	val	ser	Pne	510	Cys	Pne
90	Ala	Sor	Dro		λen	Cve	Ттг	Dho		Gln	Тиг	Cve	Sar		Dho	Pro
92	ALG	Ser	515	пец	ASII	Cys	- 7 -	520	nry	0111	- 7 -	Cys	525	niu	1110	
	Asp	Thr		Glv	Tvr	Phe	Glv		Arq	Gly	Pro	Cvs		Asp	Phe	Ala
94	-	530	_	_	-		535			•		540		-		
95	Pro	Leu	Ser	Gly	Ser	Phe	Glu	Ala	Asn	Pro	Pro	Phe	Cys	Glu	Glu	Leu
96	545					550					555					560
97	Met	Asp	Ala	Met	Val	Ser	His	Phe	Glu	Arg	Leu	Leu	Glu	Ser	Ser	Pro
98					565					570					575	
	Glu	Pro	Leu			Ile	Val	Phe			Glu	Trp	Arg			Pro
10				580					585					590		
		c Pro			ı Thi	r Arg	, Met			n Sei	Arg	j Phe			g His	s Gln
10:			595			nh.		600		. mi	. 3	- 0	60!		. al-	
10.				1 Pro	O Ala	ı Pne			3 GIU	тут	Arg	5 Sei 620		y se	r GII	n His
		61(2 Tage	יום ב		615 Mot		у (Птэт	r Tare	. 7.1 s			2 Ac	o ሞኮ፣	r Ala
	6 625	_	, πλε	- ηλ:	- GT(630		. nlt	- 1 X 1	глуз	635		LILI	, voi	. 1111	640
			ı Pha	ום.ך ב	1 G]r			Pro) G1v	y Phe			3 ምri	5 Ala	a Pro	Thr
										,		, -	1		`	

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\08012001\1889722.raw

```
108
                    645
                                        650
                                                            655
109 Pro Glu Arq Leu Gln Glu Leu Ser Ala Ala Tyr Arq Gln Ser Gly Arq
                660
                                    665
111 Ser His Ser Ser Gly Ser Ser Ser Ser Ser Ser Glu Ala Lys Asp
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                                                    685
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114
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119 <212> TYPE: DNA
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122 <400> SEQUENCE: 2
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124 ggtacctcca atcagagcca gccctgttct ccaaagccaa tccgcctggt tcaggacctc 120
125 ccaqaggagc tggtgcatgc aggctgggag aagtgctgga gccggaggga gaatcgtccc 180
126 tactactica accgattcac caaccagtcc ctgtgggaga tgcccgtgct ggggcagcac 240
127 gatgtgattt cggacccttt ggggctgaat gcgaccccac tgccccaaga ctcaagcttg 300
128 gtggaaacte eeeggetga gaacaageee agaaagegge agetetegga agageageea 360
129 ageggeaatg gtgtgaagaa geecaagatt gaaateecag tgacaceeac aggeeagteg 420
130 gtgcccagct cccccagtat cccaggaacc ccaacgctga agatgtgggg tacgtcccct 480
131 gaagataaac agcaggcagc tetectacga eccaetgagg tetaetggga eetggacate 540
132 cagaccaatg ctgtcatcaa gcaccggggg ccttcagagg tgctgccccc gcatcccgaa 600
133 gtggaactgc teegetetea geteateetg aagettegge ageactateg ggagetgtge 660
134 cagcagcgag agggcattga gcctccacgg gagtctttca accgctggat gctggagcgc 720
135 aaggtggtag acaaaggatc tgaccccctg ttgcccagca actgtgaacc agtcgtgtca 780
136 ccttccatgt ttcgtgaaat catgaacgac attcctatca ggttatcccg aatcaagttc 840
137 cgggaggaag ccaagcgcct gctctttaaa tatgcggagg ccgccaggcg gctcatcgag 900
138 tocaggagtg catcocotga cagtaggaag gtggtcaaat ggaatgtgga agacacottt 960
139 agetggette ggaaggaeca eteageetee aaggaggaet acatggateg eetggageat 1020
140 ctqcqqaqqc agtgtgqccc ccacgtctcg qccqcagcca aggactccgt ggaaggcatc 1080
141 tgcaqtaaqa tctaccacat ctccctqqaq tacqtcaaac ggatccqaqa gaagcacctt 1140
142 gccatcctca aggaaaacaa catctcagag gaggtggagg cccctgaggt ggagccccgc 1200
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144 atgcacatgg agaacaacgt ggtctgcatc cggtataagg gagagatggt caaggtcagc 1320
145 egeaactact teageaaget gtggeteett tacegetaca getgeattga tgaetetgee 1380
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152 ttcatcgtgt tcatccctga gtggcgggaa cccccaacac cagcgctcac ccgcatggag 1800
153 cagageeget teaaaegeea eeagttgate etgeetgeet ttgageatga gtaeegeagt 1860
154 ggctcccagc acatctgcaa gaaggaggaa atgcactaca aggccgtcca caacacggct 1920
155 gtgctcttcc tacagaacga ccctggcttt gccaagtggg cgccgacgcc tgaacggctg 1980
156 caggagetga gtgetgeeta eeggeagtea ggeegeagee acagetetgg ttetteetea 2040
157 tegteeteet eggaggeeaa ggaeegggae tegggeegtg ageagggtee tageegegag 2100
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161 <210> SEQ ID NO: 3
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Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\08012001\I889722.raw

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172	gage	cagaa	acg t	tgtag	geege	eg to	cccct	ccag	tc	egete	ccgg	gcag	gctg	ctg a	atgca	aggaa	120
		-	-	-	-	_		_	-	_		-	-	_	-	cttcc	
174	tgcaggcctt teettgeete tgtgggaeee tgtgggggte cateeggetg gagaagaaaa 24													240			
														297			
176																	
177																	
	aat	gag	aat	cac	qqc	agc	ccc	cgg	qaq	qaa	qcq	tcc	ctq	ctq	agt	cac	345
180		Asn Glu Asn His Gly Ser Pro Arg Glu Glu Ala Ser Leu Leu Ser His 5 10 15															
	tcc	cca	aat	acc	tcc	aat	caq	agc	caq	ccc	tat	tct	cca	aaq	cca	atc	393
							-	Ser	-		_			_			
183		20	0-1				25				-1-	30		-1-			
	cac		at.t.	саσ	σас	ctc		gag	σασ	cta	at.a		σca	aac	taa	σασ	441
186	Arg Leu Val Gln Asp Leu Pro Glu Glu Leu Val His Ala Gly Trp Glu 35 40 45 50																
		tac	taa	age	caa		σασ	aat	cat	ccc		tac	ttc	aac	сσа		489
								Asn									
189	шуз	Cyb	112	DCI	55	*** 9	014	11011	**** 9	60	-1-	-1-			65	1110	
	acc	aac	cad	tcc		taa	σασ	atg	CCC		cta	σσσ	cad	cac		ata	537
								Met									55,
192			0111	70					75	,		0-1		80	F	,	
	att	tca	gac		tta	ααα	cta	aat		acc	cca	cta	ccc		gac	tca	585
								Asn									
195	110	DCI	85		LCu	0-1	LCu	90			110		95	V	р	202	
	age	tta		σаа	act	ccc	cca	gct	σασ	aac	ааσ	aaa		ааσ	caa	caσ	633
								Ala									
198	JCI	100	vul	014		110	105		014	11011	275	110	9		9	0111	
	ctc		паа	αaα	car	cca		ggc	aat	aat	ata		ааσ	ccc	ааσ	att	681
								Gly									001
	115	001	014	014	01	120	001			01	125					130	
		ato	CCa	ata	aca		aca	ggc	саσ	tca		ccc	age	tcc	CCC		729
								Gly									, 23
204	GIU	116	110	vai	135	110	1111	GLY	0111	140	VUI	110	001	JCI	145	DCI	
	2+0	002	~~2	200		200	ata	aag	a t a		aat	aca	too	cct		aat	777
								Lys									,,,
	TTE	PIU	GLY		PIO	1111	ьец	пуз	155	пр	GIY	1111	SET	160	GIU	кэр	
207	222	a==	~~~	150	~~+	a+~	a+ =	~~~		20+	asa.	at a	tac		an c	ata	825
								cga Arg									023
	тÄg	GTII		ALG	ATG	ьeu	ьeu	_	PLO	TUL	GIU	۷ат	175	ттЪ	Asp	ьeu	
210	~		165		-	~~+	~+~	170		0 2.5	~~~	~~~		+	~~~	a+~	072
								atc									873
212	ASP	тте	GIN	Tnr	ASI	ATG	val	Ile	гЛа	urs	Arg	сту	PIO	ser	GIU	val	

Input Set : A:\sequence listing.txt
Output Set: N:\CRF3\08012001\1889722.raw

				•													
213		180					185					190					
214	ctg	ccc	ccg	cat	ccc	gaa	gtg	gaa	ctg	ctc	cgc	tct	cag	ctc	atc	ctg	921
215	Leu	Pro	Pro	His	Pro	Glu	Val	Glu	Leu	Leu	Arg	Ser	Gln	Leu	Ile	Leu	
216	195			"		200					205					210	
217	aag	ctt	cgg	cag	cac	tat	cgg	gag	ctg	tgc	cag	cag	cga	gág	ggc	att	969
	Lys			_					_	-	_	-	_				
219	-		•		215	•	•			220			_		225		
	gag	cct	cca	caa	qaq	tct	ttc	aac	cqc	taa	atq	ctq	gag	cqc	aaq	qtq	1017
	Ğlu																
222				230					235	•				240	•		
	qta	gac	aaa	σσa	tct	gac	ccc	cta	tta	ccc	agc	aac	tat	σaa	cca	qtc	1065
	Val	-				-		_	_		_		-	-		_	
225			245	4				250					255				
226	gtg	tca	cct	tcc	atq	ttt	cat	qaa	atc	atq	aac	qac	att	cct	atc	agg	1113
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228		260					265					270				•	
229	tta	tcc	cga	atc	aaq	ttc	cqq	qaq	qaa	qcc	aaq	cgc	ctg	ctc	ttt	aaa	1161
	Leu																•
	275		•		-	280					285	_				290	
	tat	qcq	qaq	qcc	qcc	agg	cqq	ctc	atc	gag	tcc	agg	agt	gca	tcc	cct	1209
	Tyr																
234	-				295	-	_			300		_			305		
235	gac	agt	agg	aag	gtg	gtc	aaa	tgg	aat	gtg	gaa	gac	acc	ttt	agc	tgg	1257
236	Asp	Ser	Arg	Lys	Val	Val	Lys	Trp	Asn	Val	Glu	Asp	Thr	Phe	Ser	Trp	
237	_		_	310			_	_	315			_		320			
238	ctt	cgg	aag	gac	cac	tca	gcc	tcc	aag	gag	gac	tac	atg	gat	cgc	ctg	1305
239	Leu	Arg	Lys	Asp	His	Ser	Ala	Ser	Lys	Glu	Asp	Tyr	Met	Asp	Arg	Leu	
240		_	325	_				330					335				
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242	Glu	His	Leu	Arg	Arg	Gln	Cys	Gly	Pro	His	Val	Ser	Ala	Ala	Ala	Lys	
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	gac																1401
245	Asp	Ser	Val	Glu	Gly	Ile	Cys	Ser	Lys	Ile	Tyr	His	Ile	Ser	Leu	Glu	
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	tac	_				_		_			_						1449
	Tyr	Val	Lys	Arg	Ile	Arg	Glu	Lys	His	Leu	Ala	Ile	Leu	Lys		Asn	
249					375					380					385		
	aac																1497
	Asn	Ile	Ser		Glu	Val	Glu	Ala		Glu	Val	Glu	Pro		Leu	Val	
252				390					395					400			
	tac																1545
	Tyr	Cys	-	Pro	Val	Arg	Leu		Val	Ser	Ala	Pro		Met	Pro	Ser	
255			405					410					415				
	gtg																1593
	Val		Met	His	Met	Glu		Asn	Val	Val	Cys		Arg	Tyr	Lys	Gly	
258		420					425					430					
	gag																1641
	Glu	Met	Val	Lys	Val		Arg	Asn	Tyr	Phe		Lys	Leu	Trp	Leu		
261	435					440					445					450	

VERIFICATION SUMMARY

DATE: 08/01/2001

PATENT APPLICATION: US/09/889,722

TIME: 18:17:06

Input Set : A:\sequence listing.txt Output Set: N:\CRF3\08012001\1889722.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date